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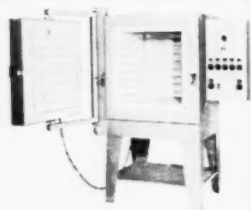
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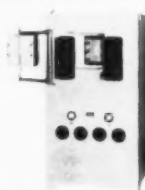
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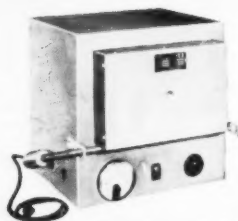
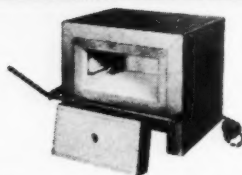
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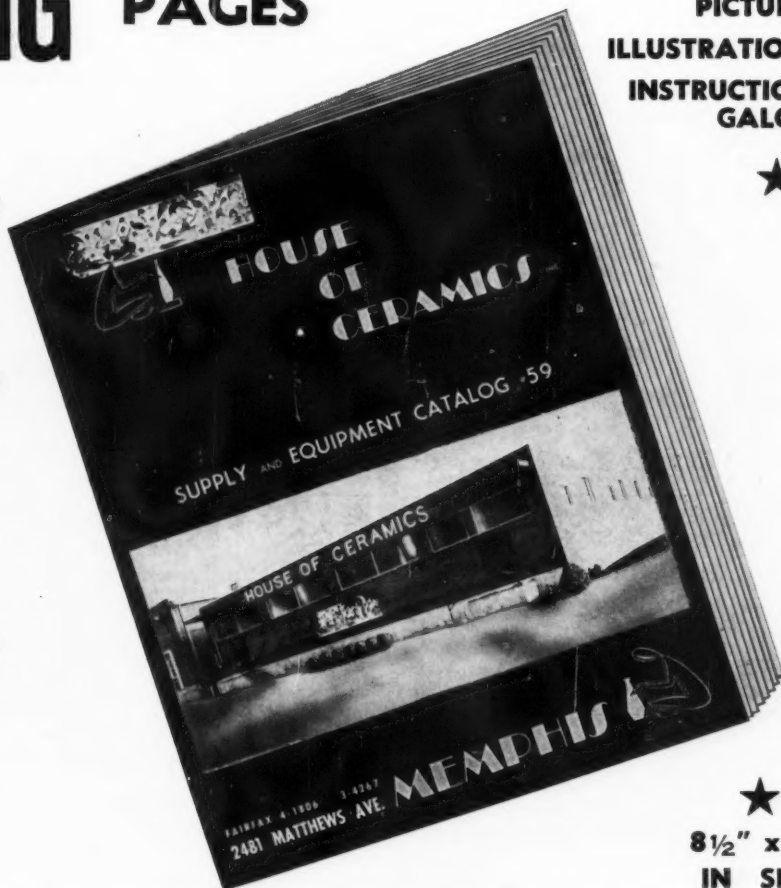
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Ceramics MONTHLY

Volume 8, Number 3

MARCH • 1960

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On Our Cover: Stoneware jar with lid, reduction glaze over iron, by Dorothy Moore Scott, Coronado, California. One of the pots in the exhibit, Arts of Southern California VI: Ceramics, at the Long Beach Museum of Arts. See the feature article on page 15.

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Letters

This column is for CM readers who have something to say—be it quip, query, comment or advice. All items sent in must be signed; names will be withheld on request. Send letters to: The Editor, *Ceramics Monthly*, 4175 N. High St., Columbus 14, Ohio.

CERAMIC HOBBY FOR RETIREMENT

Am trying now at 60 to make up for many "lost" years and am preparing for the enjoyment of making pottery in retirement. The latest addition to my equipment in a corner of our basement is a fine potter's wheel. It was a Christmas present, but so far all I do is struggle with it. The machine is working perfectly, but I am not, so would appreciate some advice on beginning to use the wheel.

EVELYN E. SNIFFIN
Rockville Centre, L.I., N.Y.

We are forwarding the CM Book List, which can be used to select books on the use of the wheel, and CM will continue to run articles on the use of the potter's wheel.—Ed.

SUBSCRIPTION OFF TO ALASKA

I was shown a copy of your magazine that the ceramic shop here at Ft. Richardson, Alaska, had. I had just purchased a kiln of my own and am most anxious to find out more about ceramics—plus contacting some supply houses for supplies.

Would it be possible to get at least one

copy of your magazine in the near future, as I am most anxious to get started? Here in Alaska everything takes longer, and I hate to wait.

MRS. ROBERT L. SNYDER
Anchorage, Alaska

SO IT GOES

As the last three or four months have gone by I have become increasingly disappointed with the content of your magazine.

It appears that the studio potter or those who are associated with the better ceramic trends of the day, are being slighted and becoming of second importance to articles on "cute, fat little animals."

Features such as Pic of the Month, Strictly Stoneware, and Lively Art of Earthenware are done in a very acceptable manner. On the other hand, the rest of the pages, filled with "artsy-craftsy" tricks are terrible.

You would do well to . . . plan a new approach to your magazine.

DON PILCHER
Glendale, Calif.

ME, TOO, MR. FROMHOLD

Your approach to the use of wheel-thrown pieces (*Multiple Pots*, January) is delightful and so much in line with my own thinking! Make the pots, bat them (perhaps) out of round, and join or cut them away to gratify your inner creative intuition as to what a really artistic and individual statement should be.

But how can we help the public to appreciate this point of view? There is a limit to how many pieces we can, as professionals, use at home! I find (or feel) more and more the frustration of having to apologize or explain why I make things as I do. I'm beginning to feel "off-beam" a little like my pots. So your assertion that "if products possess some utilitarian function as well as aesthetic, fine!"

HILDA A. WHEATLEY
W. Hempstead, N.Y.

MULTIPLE POTTS WASTED PAGES

I am a new subscriber to *CERAMICS MONTHLY* and if your January issue is an example of what you consider of interest to the ceramist I am sorry that I spent my money so foolishly. I have never seen anything so repulsive as the "Multiple Pots" by Hal Fromhold. Such a waste of five full pages that could have been devoted to something worthwhile. Are you so desperate for articles as this?

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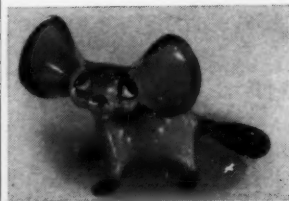
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WHERE TO SHOW

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CALIFORNIA, SAN FRANCISCO

April 3—May 1

*The Second Annual Church Art Today exhibition, sponsored by the Grace Cathedral. Eligible: all North American craftsmen. Media includes stained glass and mosaics. Entries due March 12. Juried. For entry blanks, write: Church Art Today, Grace Cathedral, San Francisco 8, Calif.

CONNECTICUT, NEW BRITAIN

April 2-24

A design competition and the annual Prestige Show of the Society of Connecticut Craftsmen, at the New Britain Museum. The Design Contest is open to members of the Society only. All entries will be screened, juried, and awards will be made. For further information, contact: Mrs. Thos. H. Skirm, 135 Maple-side Dr., Wethersfield 9, Conn.

INDIANA, SOUTH BEND

May 8—29

The 8th Annual Michiana Regional Ceramics Exhibition, sponsored by South Bend Art Association, at Art Center. Open to residents or former residents of Indiana and Michigan. Not more than

three pieces (in any combination) in categories: Creative ceramics (original design of form), sculpture, and enamel on metal. Creative mosaics also accepted. Entry blanks due April 19. Work due April 24. Juried; \$450 in cash awards. For entry blanks, contact: Miss Lorraine Paluzzi, c/o Art Center, 620 W. Washington St., South Bend 1, Ind.

KANSAS, WICHITA

April 16—May 21

*Fifteenth National Decorative Arts Ceramic Exhibition. Open to all American craftsmen. Entries due, March 19; fee, \$3. Juried; \$2000 cash, purchase and special awards. Media: Ceramics, enamels, glass, mosaics. For details, write: Mrs. Maude Schollenberger, Wichita Art Assn., 401 N. Belmont Ave.

MARYLAND, HAGERSTOWN

April 3-28

The 28th Annual Cumberland Valley Artists Exhibition for 1960, Washington County Museum of Fine Arts. All media including sculpture and ceramics. Open to residents and former residents of the Cumberland Valley area. Entries must reach the Museum on or before March 22. Jury; prizes of more than \$300. For entry blanks or additional information, write: Director, Washington Co. Museum, P. O. Box 423, Hagerstown, Md.

NEW YORK, NEW YORK

May 27—September 11

*Designer-Craftsmen, U.S.A., 1960, sponsored by the American Craftsmen's Council; accepted entries to be exhibited at the Museum of Contemporary Crafts and circulated by the American Federation of Arts. Juried; prizes. Entry fee: \$3 for members of American Craftsmen's Council. \$5, non-members. Work due April 4—15. For prospectus, write: American Craftsmen's Council, 29 W. 53rd St., New York 19, N. Y.

OHIO, CLEVELAND

May 4—June 12

The 42nd May Show, The Cleveland Museum of Art. Artists who now live or were born in Greater Cleveland are eligible. Deadline for entries is March 14. Registration fee, \$2. Jury; prizes plus special awards at the discretion of the jury. For further information contact: Mrs. Sharon Tucker, Public Relations Dept., The Cleveland Museum, 11150 East Blvd at University Circle, Cleveland 6.

OHIO, TOLEDO

May 8—June 5

Toledo Area Artists 42nd Annual Exhibition, at the Toledo Museum. Entries in all recognized art media due April

Continued on Page 32

IS THIS YOUR PROBLEM?

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Suggestions

from our readers

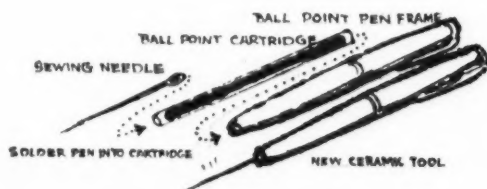
T-Square Helps in Slab Cutting

I have found a carpenter's square or T-square invaluable when cutting clay slabs to form the sides of a box or other square or rectangular piece of pottery. If a ruler is used, the resulting pieces are not so true. I have just finished a four-piece canister set. I cut the sections with the aid of a T-square and found joining them a pleasure because they were so true.

—Thelma Luther, Adel, Iowa

A Timesaver Tip

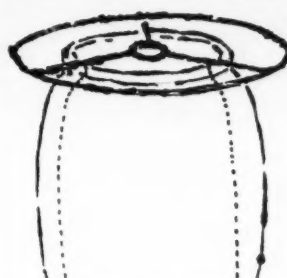
An ordinary sewing needle is invaluable as a supplemental ceramic tool, but one easily lost. To prevent this, I inserted a needle in an old ball-point pen cartridge, soldered it in place,



and returned cartridge to pen. The result is a better-balanced, more-workable tool which is easy to find, and the retractable needle point reduces finger stabs.

—Ailene Coleman, Valrico, Fla.

Divider from a Lamp Shade Frame



I've found an easy way to divide a pot into three equal segments for decorating that's easier than using a string. I keep the top frame from an old lamp shade, which is a ring with three spokes running out from the center. Just place this in the center of any piece you want to divide into three parts and mark off according to the spokes.

—Dorothy Loew, Dallas, Tex.

Let It Dry Overnight

With thinly cast or thrown pots, which must be glazed on the inside by pouring, the walls get so water soaked from the pouring that it is difficult to apply glaze to the outside. If you will pour the inside one day and let this glaze dry at least overnight, you will find that it is much easier to apply the glaze to the outside.

—Mike Miller, Seattle, Wash.

For an Extra-Long Rolling Pin

If you have trouble finding a rolling pin long enough to roll out really large slabs of clay, you can use a discarded extra-long legal-size typewriter platen—the roller the paper turns on, you know. These may be begged or bought from a typewriter repair shop.

—John Roberts, Kansas City, Mo.

Heat Ware before Reglazing

Reglazing ceramic pieces is much easier to do if the ware is heated before attempting to apply more glaze. If you don't have a heat lamp, just put the ware directly under a lamp bulb. Leave it until it is rather hot to the touch. Then apply the glaze. The heat will evaporate the water from the glaze as it is applied and prevent running.

—H. B. Chase, Little Rock, Ark.

Continued on Page 12

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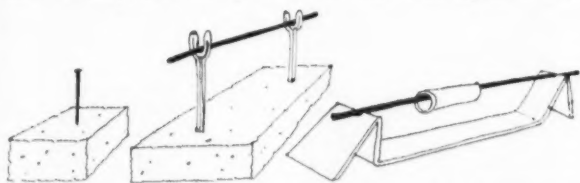
by Kathe Berl

WE ARE LUCKY that we have hardware stores! When I was a child, playing and spinning fantasies with my mother and making up wishes, I wanted a hardware store. I am still fascinated by hardware stores with all the wealth of materials just waiting for the craftsman.

In the case of copper tubing, it is waiting for a plumber or electrician, but will be very happy to go working for an enamelist to be converted into colorful jewelry, or buttons, or bud vases, or candleholders, or sculpture, or whatnot. All we need is a jigsaw to cut the tubing to the desired size and a device on which to fire the thing.

Let's devise such a device or, better, various ones. It is too frustrating to fire pieces of tubing just standing up on firing racks. They topple over and get stuck to whatever they are being fired on. One device is: Drive a nail into a piece of fire brick just enough to permit it to stand up straight. A piece of tubing, slipped over this nail, will have no more chance to fall over in the kiln. You can, of course, have more than one nail on one piece of brick, if you are daring enough to fire more than one at a time. I do not advise it though—not with tubing or anything else. The heat in kilns is not evenly distributed, so each piece matures at a different time and should be taken out at once to come out a decent enamel. If that is what you want—decent enamels—better fire them one at a time.

Another fine way to secure tubing is to suspend it horizontally over the firing rack. I do that by sticking a length of stainless steel wire through the tubing and laying this arrangement across two forks, one at each end of the wire. The forks are made by bending wire and sticking into firing brick or with binding-wire tied



onto a grill to keep the works stationary. Another way is to take a strip of sheet metal, bend the ends up and down, so that you get an upside-down V on each end. Make a hole in the center of each base of the V's and this will make an excellent cradle to balance the wire holding the enameled tubing.

Another trick in working with enameling copper tubing successfully: Before applying the enamel powder, get the copper piece red hot in the kiln to burn off grease, as you should do with spinings. Then pickle the piece. This will save you from a lot of chipping-off trouble. The only chance of counterenameling is to dip the pickled piece in slush as a basic coat. After that, copper tubing can be enameled any way you want to.

If you want a wet inlay design, slip the piece over a dowel—penholders do very well, according to size or anything that will hold the article,—so that you can hold it suspended while working.

Copper tubing comes in various diameters. There is no limit to the ideas for the use of it—from jewelry



to lamp bases. I'll give you a few hints, which I hope will make your own ideas flow.

For necklaces, cut tubing into desired bead sizes. Any tubing thinner than a cooked macaroni is hard to enamel—this is a warning—but it can be done. Enamel and fire them. When you have all the finished beads you need, lace them on a cord heavy enough to fill the tubing, and heave a knot on each end of the bead. You can heave them on next to the other or leave a space in between them. The knotting is done the following way: Start with a regular knot, then lace cord through the bead and pull tight. Hold both in your left hand (if you are right handed), stick a pin through the cord, right where the bead ends, to hold it in place, and make a knot over the pin. Then remove the pin and repeat this procedure.

For people who want their jewelry all metal here's another way.

Fashion little silver, (or any other metal) cups that fit over the ends of the tubings by either soldering some flat wire to a disc or bending up some scallops cut around a circle the size of the enameled tubing. Make a hole through each cup center, big enough for a wire and heavy enough to hold any given shape. With round-nosed pliers, bend a ring on one wire end, get the other end



through the hole of one cup, through the bead and the other cup. Cut wire to size and shape a ring again. This will hold all three pieces together and also give you the possibility of joining the beads with chains or jump rings, or just with each other. A million uses can be invented for them. You can have an original button by soldering on a shank or by sewing together a strip of leather over an enameled piece of tubing. Solder tubing to bases and you have vases and candleholders. You can bend the tubing and join with other shapes to form sculpture. Have fun! •



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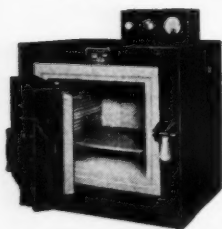
Cone 06-02 Matt

Cone 07-02 Crystalline

Cone 07-02 Crackle

Cone 07-02 Fancy Art

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Suggestions from Our Readers

Continued from Page 9

To Prevent Warping during Firing

When stacking a kiln, put pots with flaring tops in the center of the kiln to prevent their warping during firing. These shapes need an even heat during firing just as they need a careful drying after they are formed. Nearer the walls and



elements of the kiln, place vertical pots, covered jars (with the covers fired on for bisque firing), and heavy-walled pots. These are less likely to warp and are less in need of even heat.

—Thelma Smith, Cincinnati, Ohio

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—Helen Wade, Orange, N.J.

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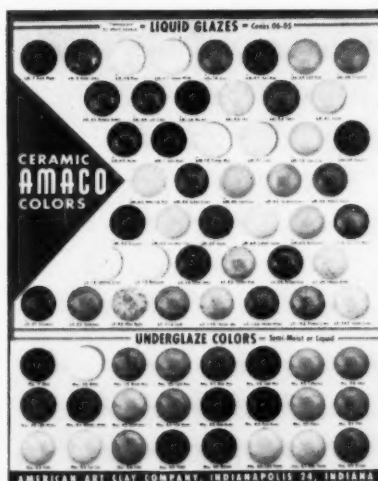
A small powerful water pump, that can be used indoors or out, can recirculate water at the rate of 120 gallons per hour. Ideal for ceramic sculpture fountains or flower arrangements, the pump requires only a small amount of water and runs



quietly on regular house current. It can be adjusted to control water flow. *Creek-Turn, Rt. 38, Hainesport, N.J.*

New Color Charts

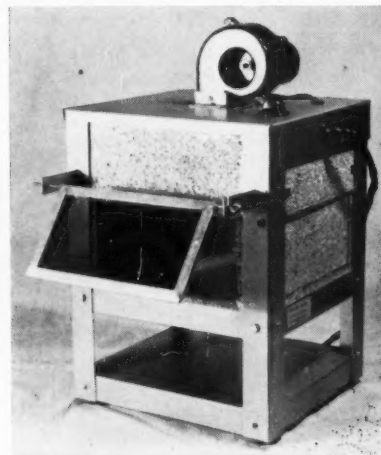
Amaco glazes, underglazes and engobes may now be selected from accurate, full-color, photographic reproductions. The



American Art Clay Company has prepared their first Ceramic Color Chart and made it available for the asking. It is printed on enamel paper by direct color process, showing 297 glazes, underglazes and engobes in beautiful, accurate colors on four 8½-by-11-inch pages. To secure this color chart, write: *American Art Clay Co., 4717 W. 16th St., Indianapolis 24, Ind.*

New Enameling Kiln

A new "instant-heat" enameling kiln has just been introduced by Gregory Kilns. This 2000° kiln, with a 7-inch by 7½-inch by 3½-inch firing chamber, uses the General Electric quartz infrared lamps as a heat source. In addition to the instant-heat feature, other advantages are said to be: economy of operation, low maintenance cost, ease of temperature selection, and minimum heat loss. The infrared lamps also provide light in the kiln so that work can be viewed easily during the



firing process. For more information, write: *Gregory Kilns, 21570 Edgecliff Dr., Cleveland 23, Ohio.*

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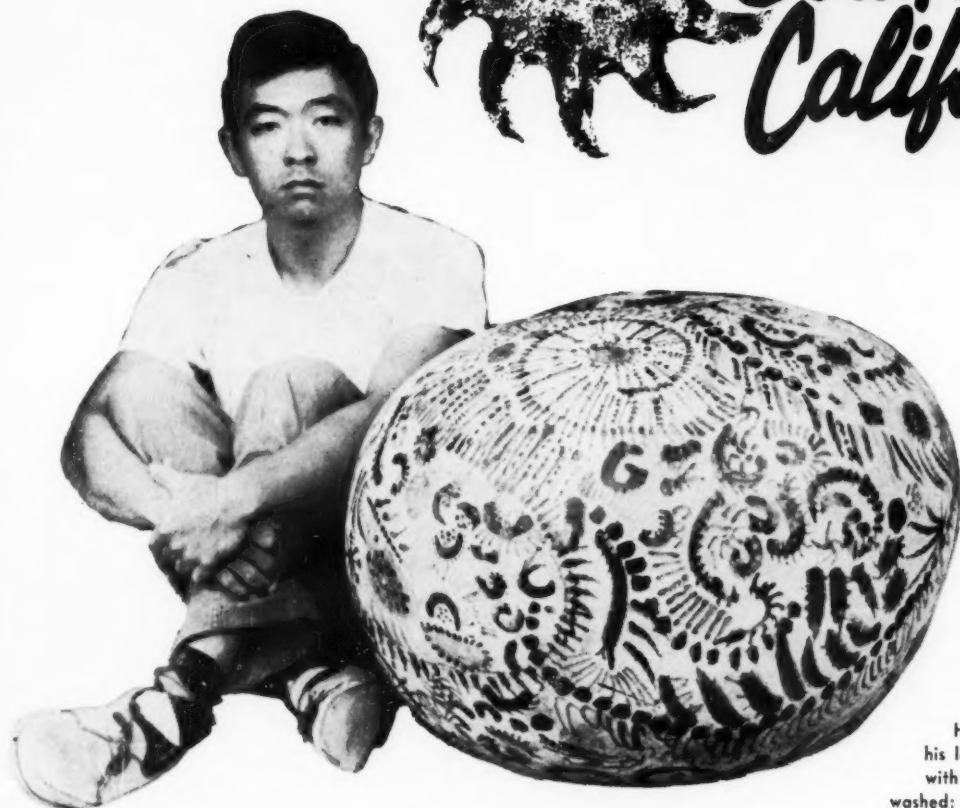
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Arts of



HENRY T. TAKEMOTO with his large Coiled Pot, decorated with oxides and slips and glaze washed; reduction fired to cone 10.

SHOW TIME

by JEROME ALLAN DONSON

CERAMICS, more than any other art form, has captured the interest of Southern California craftsmen. For the first time, ceramics is the subject of one of the exhibition series, *Arts of Southern California*, sponsored by the Los Angeles County Board of Supervisors, and held at the Long Beach Museum of Art, February 7-28.

Designed to highlight various art fields, this series has focused attention on architecture, painting, art in film, prehistoric Indian art, and prints at the five previous shows.

For this exhibit, *Arts of Southern California—VI*:

Ceramics, 42 ceramists were chosen from a list of 81 recommended by Southern California craftsmen, California museum directors, and the director of the Museum of Contemporary Crafts, New York. Two items by each craftsman went into the exhibit. The work in this show illustrates the trends of Southern California craftsmen and reflects the freshness of design and outstanding quality characteristic of this region. Some of the ceramists and their work are shown here.

This exhibit will tour several states during the coming year, concluding its tour back in California at Stanford University Art Gallery, March 1961.

● Please Turn the Page

ARTS OF SOUTHERN CALIFORNIA

Continued . . .



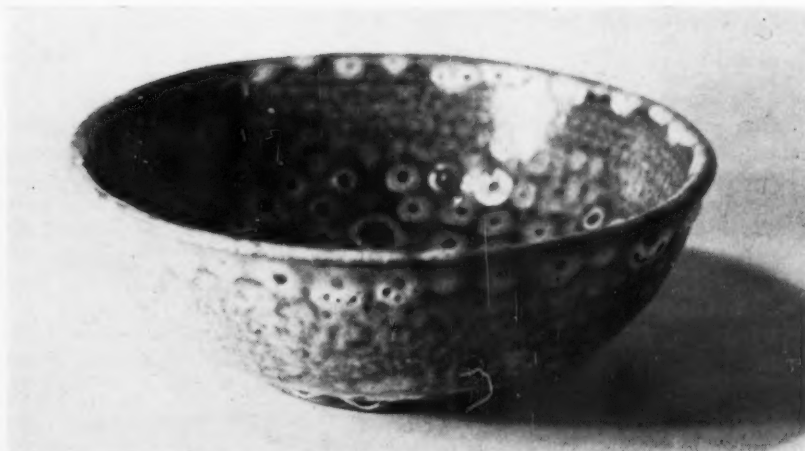
DEAN STRAWN
Pedestal bowl, Stoneware.

"Those who are sensitive and stable, who seek with a great intensity of will and desire may break the fine and invisible line of the mechanical and enter the creative realm of infinite understanding."



ROBERT MAXWELL with Samovar, Stoneware.

"To integrate and utilize ceramic expression in our environment . . . enhances my purpose as a designer craftsman. For it is here that I feel the strongest motivation—that an artist should serve mankind and enrich our cultural needs."



TOSHIKO GOTO
Stoneware bowl, cone 10.

"My approach to ceramics is directed by my desire for personal integrity—to satisfy the standards set for myself."

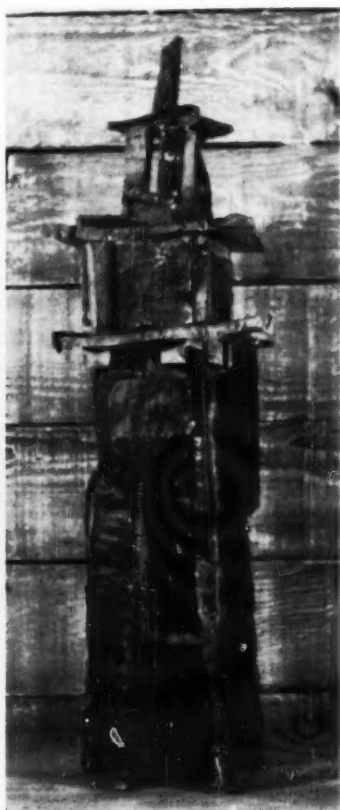


NOEL CARAWAN

Fox. Coil method, made from Lincoln clay with large amounts of grog added. Fired to 1260° C. reduction.



"Sculpture and three-dimensional form are very important to me, and clay as material, subject matter and process become increasingly more absorbing. Working in these two intermeshed mediums gives me a great deal of daily satisfaction, and I hope having my products around does something of the same for others."



SUE SHRODE
Slab construction.
Stoneware (2 parts).

"Feeling that I have said all I could with functional shapes, for the time being, I have turned to a more sculptural approach to clay . . . the more removed from an actual vessel, the more one's mind is free to accept a non-functional shape."



RAÜL CORONEL with Partridge Tree. Combination ceramic and silk-screen processes. The background is printed on white linen and ceramic pieces are applied over the design.

"Too many things are to be yet discovered that were not there yesterday, and that will influence tomorrow. They in turn will change all the yesterdays, ad infinitum."

Please Turn the Page

DORA DE LARIOS
Casserole.

"When a craftsman ceases to experiment and becomes satisfied with himself, he ceases to earn the name of craftsman."



ARTS OF SOUTHERN CALIFORNIA

Continued . . .



"Whatever the function of the container, it should be the most beautiful when in the use for which it was intended. Yet it is also hoped that when empty the piece will seem self contained and be visually satisfying through its aesthetic qualities of form, texture and color."



MARTHA LONGENECKER

Footed, textured vase, wheel thrown. Stoneware. Iron-brown glaze, cone 10 reduction.



JOHN MASON
Vase.

"The individual statement is most accurately read in the actions and in the work of that individual . . ."

F. CARLTON BALL

Stoneware garden lantern. Brown bisque clay surface; pierced design in lantern. Three pieces: base, lantern, and cover.

"To balance and fit together the complex units of materials, technique, tools and aesthetic principles into a complete art expression is a challenge that dominates my life."





KAYLA SELZER
Two persons. Stoneware sculpture.

"When I start a new work, I try to put my mind in a state of flux. . . . I may start with a simple form or shape, but I immediately watch to see what it can suggest—where I can take it."



PAUL SOLDNER
Floor vase. Stoneware.



"It is my hope that through searching in hundreds of experiments that I should find a small contribution to the history of ceramics. An idea in clay never before expressed."

JAMES HUBBELL
Thrown jar, high-fire, with bronze lid.

"I enjoy working with clay and making something that will hold things. Therefore, many of my pots are like a body without a head if their contents are taken away."



The LIVELY ART of EARTHENWARE

by KARL MARTZ

"... A GLAZE OF MANY USES"

I AM CONSTITUTIONALLY unable to leave the composition of a glaze — any glaze — unchanged. My curiosity as to what might happen by this addition or that omission or by some altered proportion of ingredients is too strong for me to resist. My friends believe that I would rather test glazes than use them on pots and I cannot deny a certain core of truth in this observation.

Although my notebook, filled with recorded trials, is approaching the size of the Manhattan telephone directory I find myself going back again and again to just a few relatively simple glazes that give me effects I like. I can count on them. They are old friends.

Here is one such cone 03 glaze I would like to pass on to you. It is essentially a non-flowing semigloss glaze that performs well in a number of ways. The NFO glaze is opaque white and NFT glaze is translucent.

CONE 03 GLAZES	NFO	NFT
Ferro Frit 3124	54	50
Ball Clay	12	12
Flint	12	12
Borax	2	2
Zircopax	10	—
Whiting	2	4
Nepheline Syenite	8	20

100% 100%

NFO Gray, add:	
Black Iron Oxide	2.0%
Raw Stain No. 66**	0.5%

NFO Gunmetal Green, add:	
Copper Oxide	10%

**Raw Stain No. 66 Batch	
Cobalt Oxide	6
Copper Oxide	5
Black Iron Oxide	30
Manganese Dioxide	34
Nickel Oxide	25

100%

Dry mix thoroughly in a mortar. Keep for use as needed.

A favorite use of the NFO Gray is as a single-fire glaze on red-firing

clay. Incising through the glaze creates a rich contrast of gray and red. The surface of the dry piece is moistened with a well-dampened sponge just before the glaze is sprayed on in a single coat, medium thick. It is important to achieve a very even coat of glaze for, although the fired surface is smooth and pleasant to the touch, it does not flow enough to level out noticeable differences in thickness.

When the fresh coating can be handled without damage, the lip or edge of the piece is carefully cleaned of glaze with light strokes of a fettling knife. The exposed edge of damp clay is then burnished with the bowl of a spoon to make it smooth and pleasant to the touch. I first used this dry edge to prevent crawling which sometimes occurs on a fully glazed lip but I soon realized that the clay color accent sharpened the whole appearance of the piece. It somehow unobtrusively emphasizes the structure and clay quality.

The surface design is incised while the glaze coating is still damp and soft enough to cut cleanly. For this I use an old dental instrument or a welding rod ground down about like a fairly sharp pencil point and smoothed with steel wool. The tool throws up a burr as it cuts, and leaves little crumbs of glaze. Later, brush the lines clean with a dry varnish brush. Even very thin lines will not close over with glaze when fired.

As a counterpoint to the reddish incised lines against the delicately speckled gray, brush-drawn lines or areas of darker gray are easily added by brushing on a solution of chromium chloride, 100 grams dissolved in 100 c.c. of water. The two grays with accents of red make an elegant but lively combination.

On bisque ware this glaze has sev-

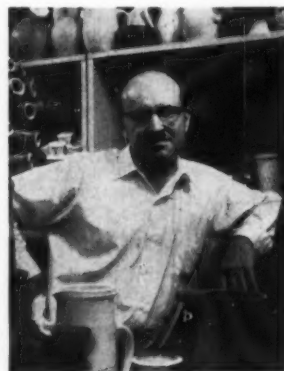
eral handsome uses, too. Spray on a smooth coat of the gray; brush on this a simple pattern with wax, and then brush on a generous coat of the white. The resulting white on gray can be rather distinguished. Leave all the little droplets of white that cling to the wax. To minimize crawling, wax the edges, which will then be gray. The wax prevents a double glaze coat on the edge.

This glaze is unusually good for crayon drawing because it retains the typical broken texture of wax crayon drawn over a rough surface. For this, the dry glaze coating must be tough enough to withstand the pressure of the crayon. Toughness is achieved by mixing 3 teaspoons of Crystal Karo Syrup to each 100 grams of dry glaze. Enough water is added to make an easily sprayable slip. A thoroughly dried coating of this glaze mixture is about as tender as a cement sidewalk and takes the crayon just fine.

To make the crayon, melt a piece of paraffin the size of a butter pat in a large kitchen mixing spoon. Add a level teaspoon of cobalt oxide; mix well and pour into the crayon mold. The mold is a tube of aluminum foil (wrap it around a pencil) stuck upright in a wad of clay. When the paraffin solidifies, peel off the foil and start drawing.

The cobalt fires to a dark blue on the gray glaze. This effect can be considerably enhanced by a restrained brushing about in the line drawing with a solution of copper sulfate, 30 grams in 100 c.c. of water. The copper solution fires to a medium cool blue which goes well with the cobalt and gray.

Continued on Page 38



KARL MARTZ, a professor of ceramics at Indiana University, presents another of his favorite techniques. This is the seventh in his series on earthenware, which started last September.

Spice Boxes



SLAB-BUILT IN A MOLD

by DON WOOD

DON WOOD, a teacher of design in the School of Fine Arts, Ohio State University, feels equally at home with clay, wood, and metal. Of the three, however, he enjoys clay the most.



their attractiveness and usefulness (and wife's prejudice?).

Also an accomplished photographer, Don takes his own how-to pictures for this series. How? He sets the scene, adjusts a delayed-release attachment on the camera, and hurries into the picture before the camera clicks.

This is the fifteenth article in this series which he has developed especially for CM. Most of the pieces he has demonstrated have ended up doing service in his own home—attesting to

SMALL PIECES of pottery can be built easily and more uniformly if you first build some construction aids.

Rather than “fiddle around” with careful measurements of all the slabs and pressing pieces together with the fingers, design some molds or forms to *help* you build. Finger marks in the clay aren't necessarily bad, and slight distortions of the piece can be quite interesting—and even enhance it. But, for beginners, who haven't yet learned complete command of the material, the chances are that the fingerprints and distortions will look like just that! The results may be far from aesthetic.

The spice boxes demonstrated here must stack together reasonably well on the kitchen countertop or on a shelf. A certain uniformity, therefore, is highly desirable. I don't promote uniformity as an end in itself, but I do promote a process that will insure a set of pieces looking like cousins even if not brothers and sisters. “Identical twins” should be avoided; if you

want *exact* mates, you shouldn't be hand-building. Slip-casting would be the better procedure.

Where a shape is to be repeated, it is certainly worth the time to work out a fabrication process that will help produce a direct, clean piece time after time with a minimum of effort. The time spent making the mold and patterns will save you time in the end. Of course, the process should be worked out to cut down “production time” as well as to conserve energy.

As your judgment of design becomes more critical you will become aware that the aesthetic quality of the design is partly a result of the intelligence of the fabricating process. If one commands the process, he commands the design; if he fumbles with the processes he cannot be a successful designer.

1. The mold and the other materials needed are quite minimal, as you can see from picture No. 1. The two halves

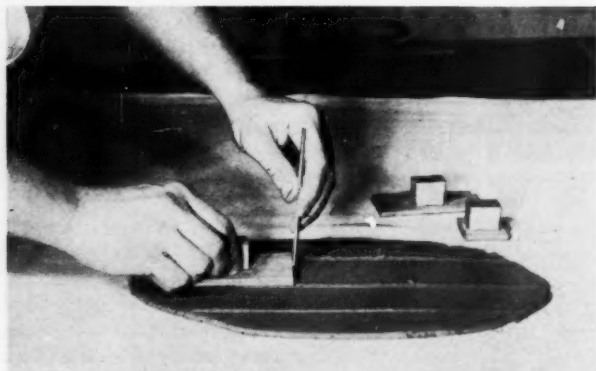
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Spice Boxes . . .

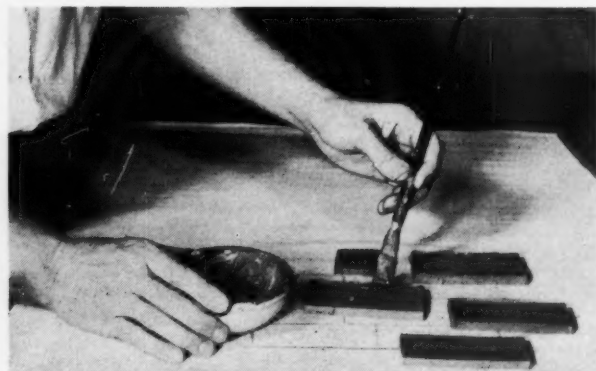
1. HERE'S THE equipment for making spice boxes: The wood mold (two pieces), three blocks for cutting patterns, a trimming knife, wood thickness strips, a rolling pin, and a brush for painting slip.



2. THE WOOD pattern with its handle is convenient for cutting out the slabs for the boxes.



3. AFTER SLABS have stiffened from air drying, thick slip is painted around the edges to be joined.



Continued . . .

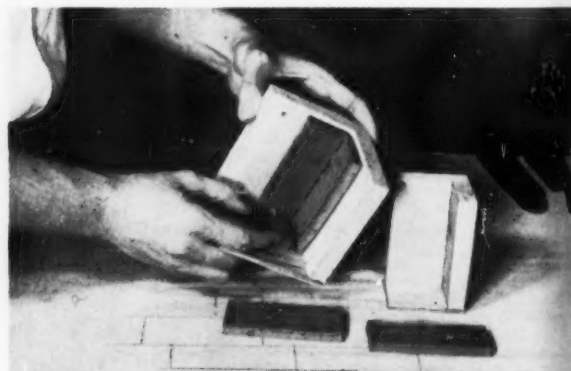
of the wood mold are at the upper left; the three blocks just below them are the patterns for cutting the slab sides of the clay boxes. These same pieces can be made from reinforced corrugated cardboard or from plaster, whichever you prefer to work with. A trimming knife, wood thickness strips, a rolling pin, and a brush and thick slip complete the materials required.

2. The clay should be as stiff as possible and still be rollable. A 3/16-inch thickness is just about right for the size boxes being made here. Determine the thickness *you* need and control it with the strips of wood that the rolling pin will ride on. The wood patterns with their convenient handles are shown being used to cut out the slabs. Care should be taken to hold the knife vertically.

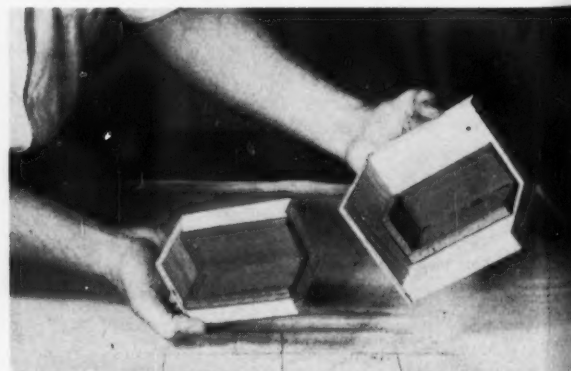
3. Allow the slabs to sit in the air awhile to stiffen. Then paint thick slip—as thick as possible—around the edges which will be joined.

4—5. The slabs are placed into the mold and pressed together very gently with the fingers. If the slabs are too soft they will probably stick to the mold. In this case, some powdered

4. TWO CLAY slabs are in the larger mold, and the bottom of a spice box is gently pressed against side slabs.



5. THE OTHER two side slabs are in place in the second mold ready for pressing the four sides together.



clay sprinkled in the mold before inserting the slabs will help solve the problem. The slabs were cut slightly large so that they will squeeze together when the two halves of the mold are pressed tightly together. (After the first experiment with the mold, the closed end of the smaller half was eliminated, leaving only the two long sides in order to finish the inside of the clay box while still in the mold.)

6. Pressure is applied to the mold to insure a firm bond between the slabs. As the wood or plaster mold is used over and over, it will become wet and the release of the clay will take longer. You may wish to lay the mold in a warm dry place after several uses so that it can dry.

7. A square-sided stick is used to true up and finish the inside of the clay box. The sides and bottom will bulge inwardly somewhat from the pressure on the mold, and flattening them in this way will firm up the joint and make a smooth interior.

8. After standing a few minutes, the mold is opened and the piece is ready to be removed. The coil of clay in the foreground and the two knobs on the piece were added to hold the lid.

9. A simple decoration was selected. A wide band was painted on one side of each container (using underglaze or slip) to act as a label. A sgraffito decoration—perhaps a sketch of the contents—can be carved through to the contrasting color. This area could also be left blank until after the glaze-firing and then labeled with a china-marking pencil (grease pencil) to identify the contents.

Different kinds of tops were designed just for experimenting and for fun. A couple of close-ups are shown here. You might see how many different ways you can think of for keeping a lid in place. You will be amazed at the possibilities.

These lids were made of mahogany and the knobs are of brass. They could have been made from clay but I selected these materials because I like the combination.

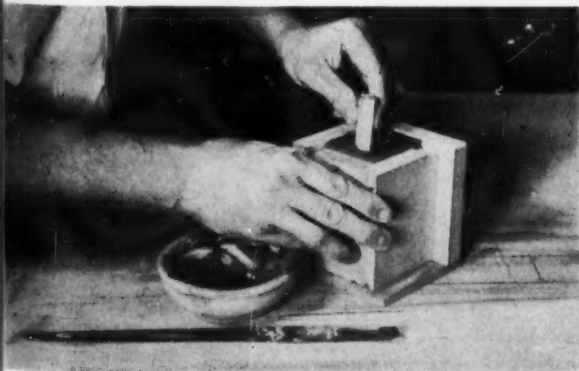
A golden-brown semitransparent glaze was used over all to make effective use of the sgraffito decoration and to preserve the painted label.

You will enjoy making this set of spice boxes and the entire family will enjoy using them. Sets like these make nice gifts, too. ●

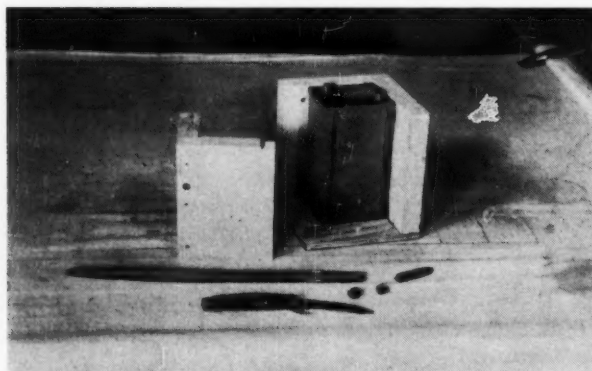
6. APPLYING pressure to the mold insures a firm bond at the joints of the slabs inside the mold.



7. A SQUARE stick of wood is pressed inside the slab box to true up the walls, which usually bulge a bit.



8. AFTER MOLD is opened, pieces from a coil of clay are added to the top to hold the lid of the box.



9. UNDERGLAZE is used to form the wide band. Then a sgraffito decoration is added to label contents.





ENAMEL silver bowls, by Edward Winter, had a clear silver flux applied and fired before the colored enamels were added. The left bowl is in light blue with a dark blue edging; the shallower bowl, a transparent pink with deep rose edging; the celery dish, with gold and black design, shows hammer marks through the lemon-yellow enamel.

Beautiful, Lustrous SILVER

This noble metal makes more precious your carefully crafted enamelwork. If you're a beginner, you'll want to gain experience in enameling on less expensive metals. Then graduate to silver for real thrills with enamels!

by EDWARD WINTER

SILVER—one of the most beautiful metals—has not been generally used in the grand manner, as it should be, by the enamel artist. Its relative high cost compared to copper, guilder's metal, and steel is probably the reason for its neglect. When large bowls, plaques or wall murals are contemplated, the enamel artist usually selects one of the cheaper metals for a base. The beginner in enameling is advised to learn on these cheaper metals, then in due time graduate to the more expensive and beautiful metal, silver.

The experienced enameler knows that the medium has many variables. Much has to be learned by doing—the correct application, proper drying, proper kiln temperature, timing, handling when the piece is red hot, further application of enamel, drying, firing, maintaining correct shape when piece is cool, and many other techniques and processes. Having a confident and positive curiosity, drive, and willingness to learn through mistakes are necessary to create the skilled technician and craftsman. Fear of cost of materials and end results should never enter the mind.

PURCHASING SILVER

Persons who love and collect silver know and value this metal and expect to pay its higher price. The Federal Trade Commission keeps the price of silver stationary. Artists working with silver can use the stamp: .925 Sterling—Handmade.



Sterling silver is an alloy containing 92.5 percent silver and 7.5 percent copper for added strength; but fine silver, which is recommended for enameling, has a higher silver content and gives less difficulty in the firing process.

German silver, or nickel silver as it is sometimes called, has much the same physical properties as brass. Its high zinc content makes this metal impossible to enamel.

The cost of sheet silver is determined by the weight. Inasmuch as most craftsmen think of silver in terms of square inches and lineal feet, the supply companies distribute mimeographed charts showing the sizes and the B&S gauges in which the metal may be ordered.

Sheet silver comes in a range of thicknesses from 12 gauge (heavy) to 26 (quite thin.) The cost of 14-gauge silver for the making of even a small bowl would run quite steep, so for reasons of economy, enamellers more often use 18 to 20 gauge. For the craftsman new to enameling silver, I suggest working with 16 or 18 gauge. Using the thinner metal for large-sized bowls makes the firing and handling more difficult. For spinning, the thinner metal is suitable; but for hand-forming and planishing, the heavy metal produces a fine object of art. The bowls shown in this article were made with 18-gauge silver.

As an aid to the craftsman, the supply company sells the sheet silver in squares, oblongs, strips, sheets, or circles. These shapes are ready for hand-forming.

FORMING SILVER

Silver is almost as ductile and workable as copper. The circles of silver which you have purchased may be formed

directly into large bowls. One method is to hammer a circle into a cup-shaped depression gouged out of the top of a wood log. Then planish the deep-drawn bowl by turning it upside down over a round steel stake and hitting it with a smooth-edged, slightly rounded planishing hammer. The hammer marks show up beautifully under a fired coat of transparent enamel. Square ashtrays, oblong and free-form shapes are also produced by this method.

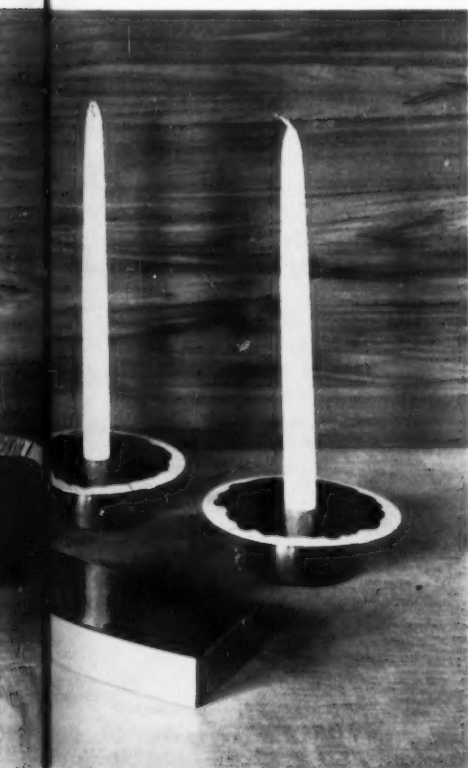
If you like, add a ring foot to the bottom of your bowl. The foot will serve an extra purpose as a rest for the piece, permitting it to be fired right-side up in the kiln. A silver ring foot may be soldered onto a bowl by using hard silver solder and flux. The quickest and easiest way to do this, I've found, is directly in the enamel kiln rather than with a torch.

CLEANING SILVER

Like any other metal, silver must be absolutely clean before it can be enameled. You may give your piece a vigorous rubbing with a dilute caustic solution or a brisk scouring with a stiff brush or fine steel wool and scouring powder. When handling your piece, the hands should be very clean and the piece picked up by the edges only.

Now place your piece in a dilute sulphuric acid bath of four parts water and one part acid. (Always add the acid to the water to avoid severe burns!) Leave the bowl in the pickle solution for 20 to 30 minutes. Then take it out and rinse with clean water. Dry with clean paper toweling or extremely clean cloth or clean wood shavings. The pickling may be done in a large Pyrex (glass) container, a glazed pickle jar, or a lead-lined tank. Rubber

Continued on Page 35



SIX footed silver bowls, on glass shelves, demonstrate Winter designs. The lowest bowls are in lime-green transparent enamel with decoration in liquid gold and string textures. The center bowls are a deep lavender and chartreuse in plain transparent colors. The top bowls are olive green and light lavender.

DECORATIVE accessories, of spun pieces of fine silver, are in a deep transparent purple. The white crackle edging harmonizes with the white candles and the flower—a lovely accent in any home!

KILN-FORMED GLASS

Prelude to Glass Lamination

Sixth in a series
by KAY KINNEY



GLASS LAMINATION is one of the favorite techniques of craftsmen working with kiln-formed glass. For those who have not as yet tried lamination, a definition is in order, as is a discussion of the materials that we can use.

Webster's *New World Dictionary* defines the verb "lamine" as follows: "to form . . . into a thin sheet. To cover with thin layers. To make by building up in layers." The adjective "laminated" means arranged into thin sheets or layers. This general term can refer to any material such as wood, metal, cloth, etc., but for our specific purpose, only materials that lie within the scope of glass will be considered.

The main material of our lamination is, of course, glass—layers or sheets of glass that are to be fused together. However, we do not laminate just for its own sake, but must have a justification for using this technique. By this method we can enrich our glass with color, or decoration, or both by encasing colorants or materials between sheets of glass that are fused by firing. Not all materials can or should be used for lamination, especially if their natural tendencies are in contradiction to those of sheet glass.

ESSENTIAL MATERIALS FOR LAMINATION

Copper Enamels, when used as colorants in either the ground or lump form, are quite difficult to adhere to exposed surfaces of sheet glass; and, since they expand and contract on heating and cooling at a different rate than that of glass, they have a tendency to loosen in patches. By laminating the enamels between two sheets of glass, they cannot release from the glass, but are sealed within the two sheets.

Ceramic Underglazes provide an excellent medium for design. However, they lack the ingredients necessary to produce a glossy protective surface, and may soil easily or even disintegrate under normal use. Lamination provides the necessary shield for these pigments.

Metals, most of them at least, release from glass after firing. Sterling, copper, brass, and iron or nichrome wire may be laminated, however, and thus are prevented from release. Wire can be utilized as a linear design element, and all but sterling silver wire will oxidize, and turn black. Lamination of sheet metal of any kind is a matter of judgment, for the glass sheets when bent become flexible, while thick or large sections of metal remain rigid. The conflicting reactions usually fracture the glass. Aluminum, copper, or brass screen may be laminated successfully. Aluminum retains its original appearance, producing dark or opalescent tints depending on the brand and its processing.

Fiberglass threads and screen, because of their finer composition, tend to disappear when exposed to direct heat on glass surfaces. Sandwiched between two blanks of

glass, they retain their composition. They may be colored with underglaze or overglaze.

Mica, when applied to exposed glass surfaces, results in rough, dull particles. When introduced in the flake form between sheets of glass, mica produces bubbles or texture. The flakes puff during firing and raise the glass directly over them. The control of these bubbles lies in the size and thickness of the individual flakes.

OPTIONAL MATERIALS

Overglaze colors sometimes are dulled or assume an entirely different hue when laminated. And as most overglazes are prepared with oil, they emit fumes which must be burned out in a light prefire before lamination. Since this is time consuming and since overglazes are actually more brilliant when fired on the top surface, it seems wise to omit laminating them except in those treatments where the effect of depth is desired.

Liquid glass coatings become fluid after the two glass blanks start to fuse together. The liquid glass "boils" just before smoothing out, and since the resulting expanded air can't escape from between the glass sheets, unplanned bubbles and granules form which sometimes are undesirable in a bent piece. These might be effective, however, in an "underseas" piece!

Glass lusters, like overglaze, must be prefired before laminating. While giving a brilliant effect on the surface, they only provide coloring when laminated.

Stained glass pieces lose much of their three-dimensional quality in lamination. In addition, the different expansions of various types of stained glass can create stress in the glass blanks, often causing fractures in the fused unit. Finely crushed stained glass, however, becomes a layer of color or colors bonding the sheet glass together. Discretion must be used in selecting the fineness of grain.

Enamel threads can be laminated or fused to the upper surface of the glass.

Silver and Gold foil for enameling are effective either on upper surfaces or in lamination. Both kinds of foil tend to be slightly more metallic appearing in lamination.

SUMMARY

It is apparent that there must be a relationship between glass and any materials to be laminated which will permit perfect fusing without discoloration or fracturing of the finished piece. Disappointment and discouragement are best eliminated by test-firing dubious or unknown types of colorants before risking them on an important piece. One word of caution: Plastics, cloth, cereals and sequins are combustible matter that burn away leaving an ash residue. You must have a knowledge of the characteristics of various ceramic and mineral materials, whether such knowledge be by instruction or by personal experience, if you are to have success in lamination. ●

CLOISSONNE IN CLAY

by CLARK HEIPLE



THIS STUDENT wears her pendant proudly.

TEACHERS WONDER how to teach more about our art heritage without using the overworked slide approach. My answer to this is to read up on the techniques I wish to introduce to the children, then put these techniques into words children understand and carefully slip in some motivation by letting the children try the techniques for themselves. By absorption, they learn something of the culture and art expressions they should know.

Cloisonne (a French term that means *cells*) technique and clay lend themselves to a classroom jewelry project. Our jewelry project went something like this: Each child prepared a mold by cutting down a square waxed milk carton to a one-inch height. Delegated students mixed plaster of Paris for the whole class—about two and three-fourths pounds of plaster to one quart of water.

The individual cartons were quickly filled with the plaster of Paris, as shown in Fig. 1 Any leftover plaster was left in the mixing can and the can and all tossed out as waste.

(Don't let the plaster get down the sink drain!)

When the molds were completely dry, each child removed the carton from his mold and sketched his jewelry design on the plaster block. Some children want to draw their designs on paper first; others want to work directly on the mold. Each should make his approach to designing as he wishes, of course. With a nail, the designs were cut at least one-eighth inch deep into the plaster mold as shown in Fig. 2. The design areas were connected so that they formed cells.

Clay was then patted carefully with the hands until one-fourth inch thick; then pressed into the mold as shown below in Fig. 3. The clay was then removed, turned over, and trimmed to the shape desired. To make a pendant, a hole for string or jewelry chain was poked through each piece of clay at the point for hanging.

Glazes, opaque and shiny, were then applied. Experimentation was done with the clay and glazes to find those that could be done in one

firing. Glazes were applied with a small watercolor brush and floated into the individual cells, as demonstrated in Fig. 4. Since such jewelry pieces are small, many were made and the students experimented with color combinations of glazes.

Since each mold can be used over and over again, each student made as many impressions as there were children in the class. Then they traded designs with each other and had a collection of the different approaches to this interesting way of making jewelry and learning art history. The molds, of course, were the property of the individual children to take home when the work in cloisonne was completed. This, they particularly enjoyed—showing their families how their masterpieces were made! •

YOUR PET IDEA may be worth \$10—if you'll share it! Just send a "Letter to the Editor" describing one of your favorite techniques for working with children. Your letter should be two or three pages long, typed double spaced, and should be accompanied by two or three clear snapshots or sketches.



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Working with GREENWARE

CLAY ENTHUSIASTS sooner or later want to make lamps. Wouldn't you like to join me now?

When you consider that a suitable form and design must be chosen to complement the home decoration, that the fittings must be selected and the lamp assembled, and a suitable shade chosen, you see that it becomes quite a project.

Whether you are using a cast shape, are hand-building, or making it on the potter's wheel, there are many forms from which to choose. The one I've chosen and shown here is quite versatile. With it, the traditionalist can use a floral decoration and an ornate lamp shade; the modernist, an abstract design with a matchstick or split-bamboo shade; the colorist can employ colored glazes to achieve brilliant effects. My design is a rather neutral one that has general appeal and fits pleasantly into most types of decor.

Using transfer paper, cut a half circle to fit the lamp base. On this, sketch your design. (On my lamp the motif was repeated four times.) Use cellophane tape to fasten the paper pattern to the cleaned greenware form. Transfer the design, changing the position as needed. Stylized buds can be added around the neck of this lamp for added interest. With the sketch completed, cut all lines evenly. Apply colored satin matt glazes to the design; then carefully sgraffito all lines again to clean them and make them sharp. Next, apply the background glaze. Fire at cone 06 to 05.

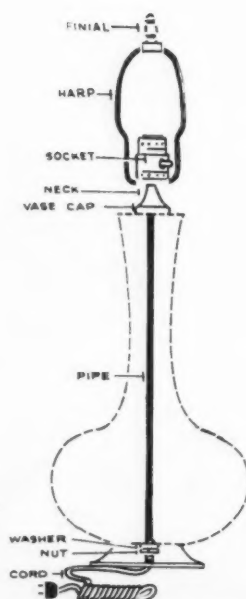
I did my lamp in an eggshell white background with the design in turquoise, black, brown, and gold.

If you want to use gold accents, apply them sparingly and re-fire the piece to cone 019. (You may want to apply a dark stain over the entire finished form to outline and give sparkle to the whole design.)

Now assemble your lamp parts and complete your lamp with a shade. With my lamp, I tried first a deep drum shade, but it covered some of the design and simply didn't seem right. The wider shade pictured here is more attractive and suitable for this lamp shape. ●

Decorating A Lamp

by PHYLLIS CUSICK



ASSEMBLE your lamp with this diagram to help you get all parts in their proper places.

MY SHADE repeats the colors in the base. The eggshell fabric has a raised thread design touched here and there with brown. The trim is eggshell, brown, and gold.

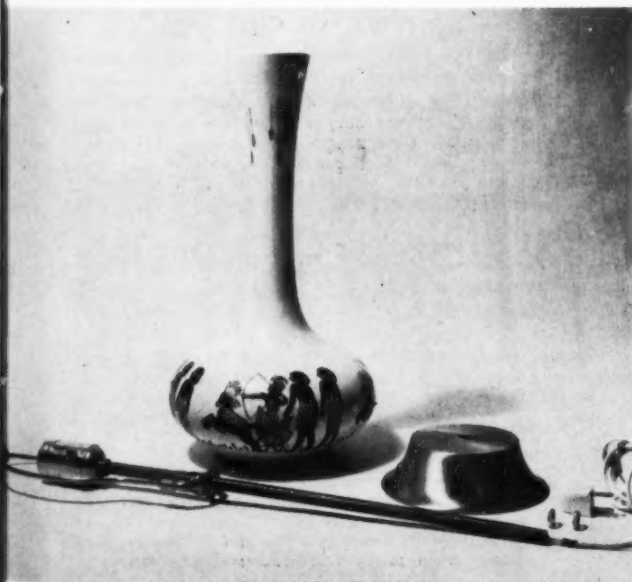


To Fit Your Decor



THE PATTERN, the form, the glazes, and tools are assembled here for our lamp project.

THIS BASE is completed and ready for assembly. The lamp parts may be obtained from your local ceramic dealer, or a hardware store, or electric supply firm.



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ROUND THE WORLD PRAISE for ENAMEL ART ON METALS

By Edward Winter

Max Flockhart, Heidelberg Victoria, Australia:—We have followed your career through ceramic trade journals that come to this country, but now that we have your beautiful book my wife and I are tempted to try our hand at enameling. We have a great deal of pottery and other forms of ceramic here but no art enamels.

Dorothy Rahman, Srinagar Kashmir, India:—Let me congratulate you on your successful book. It certainly is and will always be a big contribution to the advancement of American art. Artists of the future will always be grateful to your knowledge and experience. Your art has developed along with science and industry in the United States.

Maurice Delangre, Paris, France:—Your book ENAMEL ART on METALS is very good. It will prove useful to my artistic son-in-law and our many friends in Paris interested in your new simplified techniques.

Roberto Aloï, Milan, Italy:—I am delighted with your wonderful book ENAMEL ART on METALS. You have carried the art into fields undreamed of in this country. I am showing this book to a few of my friends practicing enameling here.

Douglas C. Lilford, Salisbury, Rhodesia, South Africa:—Our country is one of the largest copper mining areas in the world but unfortunately we see little of the processed metal. Your beautiful book and two enamel copper bowls were presented to us this past summer. It takes genius ability to create such works of art. We have placed these items in the window of our finest store in Salisbury.

Mary Roberts Lenz, Vienna, Austria:—We were thrilled when we received your book ENAMEL ART on METALS. We remember you as a fine student at the Kunstgewerbeschule here in 1931. You have done amazing things in extending this colorful medium into large bowls and murals—a field undreamed of in Austria.

Syd Vickery, Wombourn, Wolverhampton, England:—Seeing your book makes us more than ever anxious to see your large enamels for architecture exhibited in this country. You have pioneered in this field of huge art works on all types of base metals with new techniques unlike anything in the British Commonwealth.

Raul Anguiano, Mexico City, Mexico:—We have much silver in our country but no artists with the skill to enamel it. I hope your fine informative book will help them open up this field. Your step by step photos are illuminating and thrill my artist friends who can't read English.

Frances Keller, Sao Paulo, Brazil:—We are proud to own pieces of your work now we are thrilled with your fine book ENAMEL ART on METALS. It is making a hit with English speaking friends here.

Vern Nazarek, Tokyo, Japan:—We are proud to show your fine book on enameling metals to our new friends here. Japan has a great history in the field of enameled metals but your new simple techniques are quite new to them. There is no abstract enamel art here.

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Q Answers to Questions

Conducted by the CM Technical Staff

Q Is it possible to obtain the iron-flecked effect usually seen on stoneware, in the earthenware range? If so, how?—M.S., East Haven, Conn.

Natural earthenware clays are usually dark firing, with the color resulting from the presence of iron oxide in the clay. An iron-flecked appearance would, of course, be impossible since the whole mass is so colored. A dark flecked appearance could be obtained in a light-firing low-fire body by wedging into it some coarse-grained manganese dioxide.

Q I became interested in china painting after attending a ceramic show. I bought some mineral colors, enamels, paste gold, and mixing medium, thinking I could play around with these and learn by the trial-and-error method. I started reading articles on china painting and became confused about the mediums. I had supposed that I could use the one mixing medium for all the supplies I had bought. How many kinds of mediums are there?—A.D., Plattsburgh, N.Y.

There is a specific mixing medium for each technique in china painting. The formulas are mostly composed of the same essential oils but in variant proportions. In some instances there is a choice that can be used for more than one technique; and on the other hand, sometimes only one pure oil is used. You will never be successful with china painting unless the right medium is used for mixing the different pigments.

The techniques include the use of mineral colors, enamels, lustres, paste and the pure metals. Besides mixing mediums there are tinting oils for backgrounds, ground-laying oil for dry-dusting method, and essences for thinning. For instance, you may thin the paste gold with oil of lavender but that one oil will not do for mixing either the mineral or enamel colors. Nor can the same mixing medium be used for these two pigments. Formulas are worked out for each technique and most supply companies have all the mediums listed in their catalogs. If you cannot take some lessons from a teacher, you should try to work only with the mineral colors until you understand the importance of mediums.—Z.H.

Q In applying matt glazes I have been troubled by a network of cracks appearing and the glaze even scaling off before the piece goes into the kiln. I have tried adding a binder, but to no avail. I would appreciate any help you can give on this.—L.S., Boston, Mass.

Sometimes matt glazes, because of the heavier application necessary for many desired effects, do crack and peel in drying. Crawling is almost sure to develop if matt glazes are fired after this has happened. The cracking and peeling seem to occur mostly when too much glaze is applied at a time. Try waiting until each coating sets before putting on another and apply lighter layers of glaze. Also be sure to clean the ware carefully before applying the glaze.—T.F.S.

Q Is there a rule for mixing plaster and water for any given size in making a mold? Using the "hit and miss" method, I usually end up with either more or less than I need.—J.W., Erie, Pa.

Figure the size of the mold you want to make in cubic inches (width x length x height), then divide the resultant number by 80. The answer will show the amount of water needed in quarts. To 1 quart of water add 2 pounds, 12 ounces of potter's plaster.

All subscriber inquiries are given individual attention at CM; and out of the many received, those of general interest are selected for answer in this column. Direct your inquiries to the Questions Editor; please enclose a stamped self-addressed envelope.

Ceram Activities

people, places & things

CONNECTICUT CRAFTSMEN'S 25th ANNIVERSARY

The Society of Connecticut Craftsmen is celebrating its 25th anniversary this spring with a Design Competition incorporated with the annual Prestige Show scheduled for April 2-24, at the New Britain Museum.

The Design Contest (open to members of the Society only) is to stimulate design thinking and experimentation; to illustrate the many ways simple elements may be developed into good designs; to show craftsmen how to have a series of fresh ideas ready for use. The problem is to use two straight lines and a circle in the product; they may be used structurally, as a decorative element in construction or as surface decoration, or as repeats. All entries will be screened, judged, and awards will be made.

The Prestige Show is always the highlight of the year for Connecticut craftsmen. Entries are screened by the Society's Standards committee to assure a high level of craftsmanship.

During the 25 years, the Society has grown from 17 founders to a membership of 350 craftsmen. It is an independent nonprofit organization which furthers appreciation of crafts and fine craftsmanship. Its activities include sponsoring exhibits, lectures, conferences in crafts, and creating sales outlets for products of members of the Society.

BAY AREA GUILD JOINS AFFILIATED GROUPS

The Bay Area Arts and Crafts Guild was recently accepted for membership by the Affiliated Art Groups at a meeting held at the San Francisco Museum of Art. The Affiliated Art Groups sponsor the annual art festival in San Francisco.



AKRON SHOW WINNERS

Best-of-Show winners in the fall competition of the Seventh Annual Akron Mud Hen Ceramic Hobby Show were: (pictured, left to right) *Helen West*, glass; *Emily Betz*, copper; and *O. L. Adams*, ceramics. *Mrs. John Dellagnese, Jr.*, secretary of the group, serves as publicity chairman.

NCA PRESIDENT ISSUES PLEA TO STUDIO OWNERS

Ben Vaughn, Springfield, Mo., president of the National Ceramic Association, a trade group, issued a timely statement to the industry recently in *Clay Chatter*, NCA publication, regarding the promotion of hobby ceramics.

President Vaughn points out that the promotion of hobby ceramics falls largely on the ceramic studio as it can most intelligently and effectively represent the ceramic hobby field at the local level. He points out that the studio also benefits from such a program.

It is the duty of everyone in the ceramics industry, states Vaughn, to promote his industry to the general public and to other industries. NCA is assisting in the general promotion program with special advertising and information campaign.

Continued on Page 37

The Ceramic Show Window of the Nation

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Itinerary

Continued from Page 8

14. Entry fee. Jury; cash, special awards,
purchase prizes. For prospectus, write:
Toledo Museum of Art, Toledo.

SPECIAL FOR HOBBYISTS

CALIFORNIA, ANAHEIM
March 28—32

*"The Magic of Ceramics" Show, spon-
sored by California Ceramic Hobby-
crafts Associates, Inc., at Disneyland
Hotel. For details on competition for
hobbyists, write: Eleanor Mauro, 1821
W. Verdugo, Burbank, Calif.

COLORADO, DENVER
April 30—May 1

*Seventh Annual Ceramic Show, The
Rocky Mountain Ceramists Association,
in the Colorado Grange Bldg., 2475 W.
26th Ave. Anyone eligible to enter; \$1
entry fee. All entry forms must be in
the hands of the committee by April
15. Two categories—amateur and pro-
fessional. Juried; trophy cups will be
given as prizes. For entry blanks, con-
tact: Donna J. Pool, 1841 S. Forest,
Denver.

ILLINOIS, CHICAGO
August 20—23

*National Pageant of Ceramics, Sher-
man Hotel. Classes, demonstrations, hob-
byists' exhibit. Juried; cash awards, rib-
bons. For further information and entry
blanks, write: E. Kane, P.O. Box 115,
Wilmette, Ill.

KANSAS, WICHITA
April 15—17

The Fourth Annual Ceramic Hobby
Show, sponsored by the Wichita Ceramic
Arts Society, Inc., at East Armory. For
hobbyist competition forms, contact: Mrs.
Beulah Solomon, 2725 Menlo, Wichita.

NEW JERSEY, ASBURY PARK
May 5—8

*Eighth Annual Eastern Ceramic Show,
at Beachfront Convention Hall. Cash
awards. Open to amateur hobbyists, stu-
dents. Entry forms may be obtained by
writing to: Ceramic Contest, P.O. Box
652, Union, N. J.

OHIO, DAYTON
April 23—24

Second Annual Ceramic Show, sponsored
by Midwest Ceramic Association, at Me-
morial Hall. Competitive hobbyists dis-
play. For details for entering, write:
John Garwood, Box 337, New Lebanon,
Ohio.

PENNSYLVANIA, PHILADELPHIA
May 19—22

*Ceramic National Trade Show and
Workshop, Sheraton Hotel. For details
and entry blanks, write: Arthur E.
Higgs, 414 N. Jefferson, Bay City, Mich.

TEXAS, DALLAS
April 8—10

Southwest Ceramic Show, Agriculture
Building on the State Fair Grounds. For
details, write show chairman: Mrs. Edith
Nelson, Rt. 2, Box 107, Seagoville, Texas.

WHERE TO GO

CALIFORNIA, SAN MATEO
April 8—16

Annual show of the Bay Area Arts and
Crafts Guild, in the Gallery on the Mall
Continued on Page 34

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Strictly Stoneware

Ways of Using a Transparent Glaze

by F. CARLTON BALL



suggested procedures, a good stoneware pot is practically guaranteed.

Two transparent shiny glazes are presented here. Many potters have asked for more glaze recipes, so here are two excellent ones—one for a cone 3-to-6 oxidation firing and one for a cone 9-to-11 reduction firing. With the correct application and firing of these glazes, using the

GLAZE #16—A shiny transparent glaze to be fired from cone 3 to 6 in an oxidizing atmosphere.

Feldspar	44%	880 grams
Flint	24	480
Ball Clay	1	20
Colemanite	20	400
Whiting	2	40
Zinc Oxide	3	60
Barium Carbonate	6	120

100% 2,000 grams

For colors—to the 2,000 grams of base glaze, add the following coloring materials:

For emerald green, add:	
Copper Carbonate	60 grams
Rutile	22

For spring green, add:	
Copper Carbonate	30
Vanadium-Tin Glaze Stain	50
Rutile	15

For olive green, add:	
Copper Carbonate	40
Red Iron Oxide	50
Rutile	15

For opal blue, add:	
Cobalt Oxide	5
Rutile	60

For amethyst, add:	
Manganese Dioxide	100
Rutile	20

For blue-green, add:	
Copper Carbonate	30
Cobalt Oxide	5

For sky blue, add:	
Harshaw Turquoise G.S. #500	120

For yellow, add:	
Vanadium-Tin Glaze Stain	120

For opaque white, add:	
Tin Oxide	140

For ivory, add:	
Rutile	200

This glaze is sensitive to color. Many additional colors can be made by varying quantities of colorants and by making different combinations.

Some suggestions for the use of this glaze:

1. Cover your bisque pot with either the opaque white or ivory glaze, then apply a medium layer of a transparent colored glaze. The opaque glaze will bubble through the top layer of transparent colored glaze and give a beautiful mottled effect.

2. Trail a pattern on your pot with the opaque white or ivory glaze, using an ear syringe. Next spray a thick layer of a colored transparent glaze over this. The design will show as a tint of the colored glaze that is the background color.

3. To reverse the effect of #2: Completely cover the bisque pot with opaque white or ivory glaze, then scratch out a broad-line design, scraping away the glaze to the bisque pot. Now spray a medium layer of colored transparent glaze over this. Be careful in applying this second layer of glaze. If it is too wet or heavy and soaks through the first layer of glaze, then large areas of glaze will drop off the pot in firing.

4. Trail a pattern on your bisque pot using the base glaze—a colorless transparent glaze—in an ear syringe. Cover the pot with a thick layer of colored transparent glaze.

5. Spray any colored glaze over any other colored glaze.

6. These colored transparent glazes are excellent ones to use over engobe decorations.

7. Underglaze pigments will give good results when painted over the opaque white or ivory glaze.

GLAZE #10—A transparent shiny glaze that is to be fired at cone 10 in a reduction atmosphere.

Feldspar	1440 grams
Kaolin	60
Flint	900
Whiting	90
Colemanite	300
Dolomite	300
Zinc Oxide	60
Barium Carbonate	150
Tin Oxide	90

For colors—to the 3,390 grams of base glaze, add the following:

For opaque white, add:	
Zircopax	300 grams

For celadon, add:	
Red Iron Oxide	60

For dark celadon, add:	
Red Iron Oxide	120

For brown, add:	
Red Iron Oxide	180

For blue, add:	
Cobalt Blue Glaze Stain	40

If fired in just the right way, this glaze

Continued on Page 36



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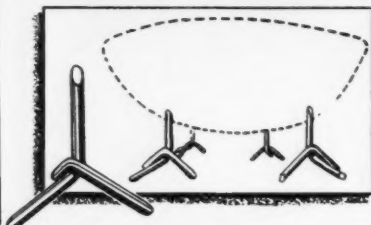
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Itinerary

Continued from Page 32

at Hillsdale Shopping Center. Judges of the show will be: Antonio Prieto, head of the art department, Mills College; Miriam Lindstrom from De Young Museum, San Francisco; and Paul Mills, director, Oakland Art Museum.

GEORGIA, ATLANTA

March 15—April 17

"The Story of American Glass," Smithsonian traveling exhibition, Georgia Institute of Technology.

ILLINOIS, QUINCY

March 1—22

"National Ceramic Exhibition," Sixth Miami Annual, Smithsonian traveling exhibition, Quincy Art Club.

INDIANA, BLOOMINGTON

through March 18

Four Crafts, 1960, invitational exhibit, ceramics, enamels, jewelry, and weaving, at Art Center.

INDIANA, SOUTH BEND

through March 15

"Midwest Designer - Craftsmen," Smithsonian traveling exhibition, University of Notre Dame.

MINNESOTA, DULUTH

through March

"Fiber, Clay, and Metal," sponsored by The Saint Paul Gallery and School of Art, at Tweed Gallery, University of Minnesota at Duluth.

NEW YORK, NIAGARA FALLS

April 23—24

Seventh Annual Exhibit, at the International Center and Girls Club, sponsored by the Niagara Ceramic Guild. Theme: Ceramics in Storybook Land.

NEW YORK, SYRACUSE

March 12—April 10

The 8th Regional Art Exhibition of the Everson Museum of Art (formerly the Syracuse Museum of Fine Arts). Media will include ceramics. The exhibition will be selected and awards made by Harris K. Prior, director of American Federation of Arts.

PENNSYLVANIA, PHILADELPHIA

March 13—June 19

"British Artist-Craftsmen," Smithsonian traveling exhibition, Commercial Museum.

PENNSYLVANIA, PHILADELPHIA

through March 23

"Ceramic International," sponsored by the Syracuse Museum of Art, at Philadelphia Art Alliance.

PENNSYLVANIA, PHILADELPHIA

April 1—May 1

"The Arts of Venice," glass paintings, mosaics, ceramics and art glass, at Art Alliance.

WASHINGTON, SEATTLE

March 6—April 6

Eighth Annual Northwest Craftsmen's Exhibition, Henry Gallery, University of Washington.

WASHINGTON, SEATTLE

March 2—27

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Beautiful, Lustrous Silver

Continued from Page 25

gloves should be worn to protect your hands. Use long metal tongs for lifting the bowl from the acid bath.

PREPARING ENAMEL

Enamel suppliers have lists of available colors and fluxes necessary to get good results on silver. Order your enamels ground to go through an 80-mesh sieve. I like to use transparent enamels rather than opaque for silver. It seems a shame to cover up a highly polished surface with an opaque enamel. Silver is an extremely high-keyed surface and gives beautiful results with transparent enamels—quite different from the results with transparent enamels on copper.

The powdered enamels should be washed with clean water so that all silt and foreign matter can be drained off. Do this with care so that you don't pour away the enamel itself. Dry the enamel to get it back into the powdered state. Drying may be hastened by placing the enamel on top of the enameling kiln or in the kitchen oven.

APPLYING ENAMEL

You use the same procedure for enameling a silver bowl as you do for enameling a copper one. The enamels, themselves, are slightly harder and the silver is somewhat harder than copper; they seem to fit each other better when fired.

The first step in application is to apply a thin gum tragacanth solution to the silver piece with a large camel-hair brush. It will serve as a binder to hold the enamel. Then sift the enamel onto the silver, using an 80-mesh hand sieve that is at least five or six inches in diameter.

To get best transparent results on silver, apply the first coat of enamel very thinly—just be sure that the metal is completely covered. After the piece is fired, sift on a second coat of the same color and refire.

FIRING SILVER

A sharp, quick heat at about 1490° to 1500° is best for silver. Don't have the kiln pyrometer set any higher than 1500°F. because fine silver goes soft and liquid at about 1700° to 1761°F. The melting point of sterling silver is even a bit lower.

Be sure that the pins or metal supports you use for your piece are preheated thoroughly before setting the bowl on them. The bowl can be fired right side up if no enamel is to be applied to the reverse side. If both inside and outside have been enamelled and there is no foot to rest it on, the bowl should be fired upside down.

Fire the bowl about 2½ minutes.

The thinner the silver you use, the greater the tendency of the enamel surface to crack upon its second or third firing. Heavier silver can be fired many more times than can the thinner metal.

There are a few colors that don't fire successfully directly over silver, as is also the case with copper. The enamel supplier lists these colors and also furnishes a hard clear flux, that is to be applied and fired onto the metal first, to serve as a base for these sensitive colors. Flux is necessary for a good transparent pink, yellow, yellow-green, cherry red, ruby, and lavender. The cool colors like the blues and greens can be used directly on the silver. If you want a deep ruby (no ruby as deep as can be obtained on copper or gilder's metal can be produced on silver) the silver should be preheated to a low red heat and cooled before the enamel is applied.

In your efforts to produce a beautiful enameled silver bowl, just remember that if mistakes and defects do occur, you can always hammer off the fired enamel, reshape your bowl, and start over. Only the small bit of enamel is wasted; but then, you learned in the process. ●

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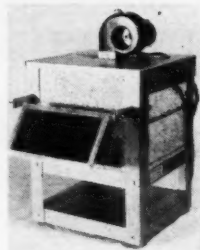
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Strictly Stoneware

Continued from Page 33

will give a beautiful rich ox-blood red with 15 grams, or 1/2 of 1%, of copper carbonate added.

Glaze #10-A—This formula is a slight variation of #10, which gives a copper red glaze if fired to cone 10 in a reduction atmosphere.

Feldspar	48%
Kaolin	2
Flint	30
Whiting	3
Colemanite	5
Dolomite	10
Zinc	2

100%

With this glaze try the following color combinations:

For an excellent copper red, slightly opaque and muddy, add:

Barium Carbonate	10.0%
Copper Carbonate	.5
Tin Oxide	3.0

For a deeper red color with some blue in it, try this variation. The blue is probably due to the CaO in the colemanite. Add:

Colemanite	10.0%
Copper Carbonate	.5
Tin Oxide	3.0

This variation should give an old rose color. Add:

Zinc Oxide	10.0%
Copper Carbonate	.5
Tin Oxide	3.0

This should give a pale mottled gray and pink color—a good start toward a peach bloom glaze. Add:

Barium Carbonate	5.0%
Zinc Oxide	5.0
Copper Carbonate	.5
Tin Oxide	3.0

For the best red—a cherry red translucent glaze, add:

Barium Carbonate	5.0%
Colemanite	5.0
Copper Carbonate	.5
Tin Oxide	3.0

For an excellent violet red, approaching the flambe glaze, add:

Zinc Oxide	5.0%
Colemanite	5.0
Whiting	5.0
Copper Carbonate	.5
Tin Oxide	3.0

To return to glaze #10, here are some suggestions for its use:

1. This colorless glaze over a red clay gives a beautiful pearl gray color.

2. If this glaze is applied very heavily over a pot covered with a dark iron engobe and if the kiln is fired slowly to cone 9 1/2 or 10, the finished glaze should be a beautiful pale blue of the *Chun* blue the Sung Dynasty potters of China used on some of their pots.

3. Red clay pots decorated with a white engobe make a good appearance when this colorless, or celadon, or blue glaze is used over them.

4. Pots decorated with all engobes give a good effect when this glaze is used.

5. With a syringe of colorless or opaque white glaze, trail a pattern on your bisque pot. Spray a thick layer of celadon,

dark celadon, brown, or blue over the trailed pattern.

6. Paint a red iron oxide design on the bisque pot. Spray any of the colored transparent glazes over it.

7. Glaze your pot with any of the colored transparent glazes. Paint a design on top of the glaze with red iron oxide.

8. Glaze your pot with the clear colorless glaze. Cover the glazed pot with wax. Scratch a design through the wax and glaze. Paint a very thin coat of copper carbonate over the pot to put a little of the copper carbonate into the design lines. This will give, upon firing properly, a gray glaze with red pattern.

9. Cover a pot with colorless glaze, celadon glaze, or blue glaze. Paint a design on the unfired glaze with a thin weak mixture of copper carbonate, gum, and water. Then fire the pot.

10. Glaze the pot with colorless glaze or celadon glaze, blue or opaque white glaze. Paint a design with liquid wax. Paint a thin layer of copper carbonate over the pot or a thick layer of red iron oxide on the unfired glaze.

These are just a few of the many ways this glaze can be used. Each fired result should suggest new things to try. The experienced potter will have no trouble using his own methods with this glaze. The suggestions described here should enable the beginner to produce handsome pots. ●

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Continued from Page 31

AMONG OUR AUTHORS

■ Edward Winter, author of the book *Enamel Art on Metals*, has written widely for art and trade journals and exhibited his work with enamels widely, too. He is



particularly well known for his enameling of large pieces and huge murals and his experimentation with all types of metals for bases. He has been awarded the coveted Charles Fergus Binns Medal by the *American Ceramic Society* for his contributions to his field.

MIDWEST DESIGNER-CRAFTSMEN

The Midwest Designers-Craftsmen met for the last time as an autonomous group and for the first time as the *North-Central Regional Division of American Craftsmen's Council*, January 9-10, in Chicago. Harold Milbrath, Milwaukee, presided over both sessions.

New professional members accepted at this winter meeting were ceramists, Rose Migdol, Helen Shangam, and Gwen Schacht.

A regional conference of the North-Central Division of ACC is scheduled for June 24-26. A committee of representatives from each state, now participating in MDC, is working on final details of this summer conference.

CRAFTS EXHIBIT AT DE YOUNG MUSEUM

Some 30 ceramic pieces by James Lovera are in the ceramic display, in an exhibition of works of three California artist-craftsmen, at the *M. H. De Young Memorial Museum*, San Francisco, February 20 through March 20.

Lovera, assistant professor of art at San Jose State College, is showing bowls, vases, and jars in earthenware and stoneware, both glazed and unglazed. He has used many types of glazes, both low and high fire, including salt glaze and lustres. Lovera's work demonstrates a variety of textural treatments and striking notes of color. He is also represented in the permanent collections of the *Toledo Museum of Fine Arts*, the *Walker Art Gallery*, Minneapolis, and the *Baltimore Museum*.

OAKLAND ART MUSEUM ELECTS

New officers, elected at the second annual meeting of the Board of Directors of the *Oakland Municipal Art Museum*, Oakland, California, are: Peter Howard, president; Robert H. Bolman, vice president; Harold B. Smith, treasurer; and Mrs. John T. Beales, secretary.

Continued on Page 38

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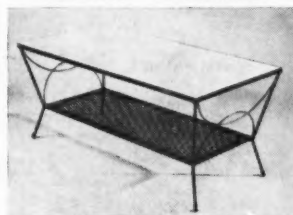
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CERAMICS MONTHLY
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CeramActivities

Continued from Page 37

CERAMIC HOBBY SHOW IN CHICAGO

Manufacturers of ceramic equipment and supplies will be on hand with their latest, ably demonstrated by artists and teachers, at the Greater Chicago National Pageant of Ceramics to be held at the Hotel Sherman, Chicago, August 20-23. There will also be closed sessions for manufacturers and buyers; open competition for hobbyists and professional ceramists. Entry blanks for entering the competition are now available (see Itinerary, page 32).

This show is timed especially to be a prelude to fall school and hobby-group activities. The exhibition hall is air conditioned; and the sponsors of this show, Mr. and Mrs. Elmer Kane, promise an exciting and pleasant three days of education in ceramics.

Earthenware . . .

Continued from Page 20

On the same tough surface you can make pen drawings using soluble colorants for ink. The strongest color I have found for this purpose, a deep blue green, comes from a mixture of cobalt sulfate and chromium chloride, 30 grams of each in 100 c.c. of water. The solution softens the hard surface almost immediately, so use a light touch and keep the pen moving. Also, you cannot draw over the same line again without letting the first one dry thoroughly.

This chromium-cobalt "ink," either pen or brush drawing looks even better on the NFT composition. It has a very pleasant smooth but not really glossy surface, and over red clay acquires a subdued, translucent frostiness.

The NFO Gunmetal Green is more gunmetal colored than green but it has green undertones. I use it mostly on fairly flat surfaces, ash trays, plates, tiles, on which I trail rather heavily the NFO white or gray, or the NFT. These light colors are considerably darkened by the gunmetal color which bubbles up through the trailing in a pleasing way. Sometimes I reverse the order and trail the gunmetal onto the white. This makes strong black lines with green edges against the white. Much more subtle is the gray trailed on the white.

Although responsive to a great variety of techniques which I have only partially covered—incising, crayon, "ink," trailing, wax resist—this glaze yields its special quality best to a rather relaxed use of one technique at a time. Easy does it! •

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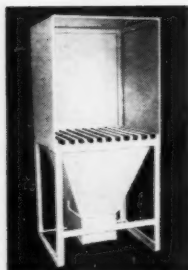
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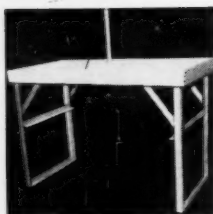
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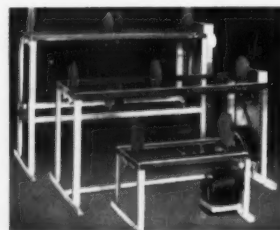
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